INSTALLATION RESTORATION PROGRAM:

FACT SHEET

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT Bethpage, New York



SEPTEMBER 1993

INTRODUCTION

The Navy has recently completed its Phase 2 Remedial Investigation/Feasibility Study (RI/FS) field activities at the Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage. A Phase I RI was completed in May 1992. This Fact Sheet summarizes the RI (Phase I and 2) results and discusses the on-going remedial process.

PHASE 1 RI

The Phase 1 RI focused on groundwater and soils located at the NWIRP Bethpage. The results of the Phase 1 RI indicated that the groundwater at the NWIRP Bethpage is contaminated with solvents and to a lesser extent metals. The primary contaminant (solvent) found was trichloroethylene (TCE), which was used as an industrial degreaser. In addition, the soils were found to be contaminated with metals, polychlorinated biphenyls (PCBs), and solvents. The detailed results from the Phase 1 RI are available at the Bethpage Public Library Information Repository.

PHASE 2 RI

The overall objective of the Phase 2 RI was to further characterize the nature and extent of environmental contamination and associated risks to human health and the environment at and near the NWIRP Bethpage. The data collected during the Phase 2 RI, in conjunction with the Phase 1 results, will be used to develop and evaluate potential cleanup options in the Feasibility Study (FS). The Phase 2 activities focused on supplemental sampling and analysis for PCBs in soils at the NWIRP Bethpage and volatile organics in groundwater at and near NWIRP

Bethpage. Field investigations included the following activities: surface/subsurface soil sampling and analysis, groundwater sampling and analysis, soil-gas measurements, and the installation of temporary and permanent monitoring wells.

RESULTS

The soil testing program indicated low-level PCB contamination at selected areas on the Navy's property. The majority of the contaminated surface soils contained PCBs at acceptable levels; however, one location on the Navy property exceeded applicable Federal criteria for acceptable PCB concentrations. This location was covered with soil as an interim action to prevent exposure to on-site workers. Note, this location does not pose a threat to local residents. The effected soil at this location will be excavated and treated off site.

During Phase 2, permanent monitoring wells were installed offsite. These wells were sampled to determine if the chemicals found in the on-site groundwater had moved off of the Navy's property. The results showed that contamination has migrated east and south towards the Long Island Railroad and Grumman property. It should be noted that the levels of groundwater contamination found outside the Navy's property were much less than the levels measured on the Navy's property, but did exceed New York State Drinking Water Standards in some locations. As an example, the chemical 1,1,1, trichloroethane (TCA), also used as an industrial degreaser, was found at a maximum concentration of 16 parts per billion (ppb) in one of the off-site wells. The New York State standard is 5 ppb. By comparison, the levels of this same chemical found in groundwater beneath NWIRP Bethpage were about 10,000 ppb.

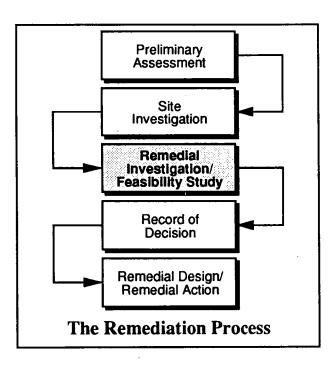
As stated in the previous Navy Fact Sheet, there are instances where drinking water standards have been exceeded in groundwater outside of the Navy's property. However, persons in the vicinity of the Navy and Grumman facility are not at any increased risk from groundwater contamination since an exposure pathway does not exist. Households in the vicinity of the Navy and Grumman

facility do not use private, individual wells to obtain drinking water. These residents receive their drinking water from the Bethpage Water District, a municipal source that is tested on a regular basis. Residents can be assured that if the municipal water that is tested and found to exceed drinking water standards, the affected well would be shut down.

During the Phase 2 RI, a soil-gas survey was conducted in areas of the Navy's facility to identify additional sources of groundwater contamination for cleanup. This survey revealed an additional source of contamination at NWIRP Bethpage underneath one of the manufacturing plants.

GROUNDWATER COMPUTER MODELING

Groundwater flow patterns beneath the NWIRP Bethpage and adjacent areas are very complex due to the influence of numerous subsurface conditions including nearby pumping and recharge.



As part of the Phase 2 RI, a computer model of the local groundwater regime was generated to assist in the identification of potential source areas (an area which contributes to groundwater/soil contamination), to determine the impact of the known source areas, and to project the potential impact of the site-generated contamination on off-site receivers. During the FS, the computer modeling will also be used to design a groundwater extraction system and to evaluate the effectiveness of remedial alternatives.

NEXT STEP IN THE PROCESS

The Navy has finished their investigations in the Remedial Investigation/Feasibility Study (RI/FS) phase of the remediation process. The RI report will be finalized in the fall of 1993. Currently, the FS is being developed to evaluate alternatives for the most effective cleanup method of the soil and groundwater contamination. The FS is also scheduled for completion in the fall of 1993. Based on the FS, a remediation strategy will be selected and the Remedial Design/Remedial Action will be initiated.

COMMUNITY RELATIONS ACTIVITIES

The Community will have an opportunity to become involved in the remedial process at the completion of the FS. At this time, the Navy will sponsor a public meeting to announce the RI/FS results and to provide the public with an opportunity to comment on the reports, including the potential cleanup methods. The public meeting is scheduled for early 1994.

Until then, if you would like to discuss the program in further detail, or want to be placed on the mailing list, please write or call Jim Colter,

Navy Remedial Project Manager, or Jack Dunleavy, Technical Manager at:

Naval Facilities Engineering Command 10 Industrial Highway Mail Stop 82 Lester, PA 19113-2090 (215) 595-0567 ext. 163/152

The Navy strives to keep the public informed about their activities under the IR Program. For Bethpage, an Information Repository has been

established at the Bethpage Public Library (Information Desk), 47 Powell Avenue, Bethpage, New York, 11714. All reports generated to date are available for your information.